## ABSTRACT OF THE DISCLOSURE

The invention combines the step of adding chemicals such as

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alkaline peroxide to an intermediate line after refining, with the step of applying chemicals such as alkaline peroxide as a pre-treatment before primary refining and/or applying chemicals such as alkaline peroxide at the primary refiner. This is implemented in the preferred embodiment, by pre-treating feed material, refining the materials into a pulp in a superatmospheric refiner, and adding chemicals in the post refining blow-

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line.

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